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(54) Title: A MATERIAL COMPOSITION FOR NANO- AND MICRO-LITHOGRAPHY

(57) Abstract: A material composition, which is used as a liquid resist, includes a first component comprising a monomer portion and at least one cationically polymerizable functional group, and a crosslinker reactive with the first component and comprising at least three cationically polymerizable functional groups. The material composition also includes a cationic photoinitiator. Upon exposure to UV light, the material composition crosslinks via cure to form a cured resist film that is the reaction product of the first component, the crosslinker, and the cationic photoinitiator. An article includes a substrate layer and a resist layer formed on the substrate layer from the material composition.



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